



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,483	03/05/2004	Matthew T. Starr	47320.0147	2482

20874 7590 11/29/2005  
WALL MARJAMA & BILINSKI  
101 SOUTH SALINA STREET  
SUITE 400  
SYRACUSE, NY 13202

EXAMINER

EVANS, JEFFERSON A

ART UNIT PAPER NUMBER

2652

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/708,483	STARR ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jefferson A. Evans	2652	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,44-49 and 80-82 is/are allowed.
- 6) ☒ Claim(s) 3-23,27,29-33,38-41,50-62,67-69 and 73-79 is/are rejected.
- 7) ☒ Claim(s) 24-26,28,34-37,42,43,63-66 and 70-72 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*By*

Claims 1 to 82 are pending.

### ***Specification***

1. The title of the invention is not adequately descriptive. A new title is required that is more clearly indicative of the invention to which the claims are directed by making some reference to an inventive aspect of the claimed data cartridge library or the claimed data cartridge magazine.
2. The abstract of the disclosure is objected to because the abstract should be limited to a single paragraph on a separate sheet within the range of 50 to 150 words.

### ***Drawings***

3. The drawings are objected to because the line quality of many of the figures is bad, making some details difficult to see. Also, the some of the reference characters and lead lines are hard to read and/or poorly drawn.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

4. Claim 20 is objected to because of the following informalities: claim 20 depends on claim 188 which appears to be a simple typographical error and the assumption is made that claim 20 should actually depend from claim 18.

#### ***Claim Rejections - 35 USC § 112***

5. Claims 3-17 and 50-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 – line 30, the recitation of "a user interface" creates confusion as "a user interface" had already been established in line 20. Do the two recitations refer to the same structure or different structure? Claim 50 – lines 7 and 25 to 28, the recitations of "full-height drive" and "half-height drive" are not adequately defined. It is unclear if the phrases are meant to literally establish that one or more dimensions of a half-height drive is exactly half that of a full-height drive or whether the reference is to more detailed involved format specifications. Also, from lines 25 to 28 it is not clear whether the first and second half-height drives would be

Art Unit: 2652

provided in addition to a full-height drive or instead of a full-height drive. Claim 55 has language similar to that of claim 50.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 18-23, 27, 33, 38, 40, and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Caverly (U.S. 6,580,582). Note figures 4 and 5. The inner assembly 116 reads on the channel structure which has side walls 148,150 and a back wall 162 and a divider 156 which reads on the claimed coupler, and upper and lower magazines 22 which read on the first and second channel structures. As per claims 19-22 and 41, the lower and upper walls of the lower magazine can read on the claimed separated end portions and do not form a substantial portion of the back wall. As per claim 23, each of the upper and lower magazines which form the first and second channel structures have side walls which can read on the first channel structure first surface and a back wall which can read on the first channel structure second surface. As per Claim 27, each of the upper and lower magazines which form the first and second channel structures have side walls and a back side wall which can read on the

Art Unit: 2652

first channel structure first surface and the first channel structure second surface and the first channel structure back surface. As per Claim 33, both cartridge magazines 22 are depicted in figure 4 are depicted as having cartridge slot dividers which will read on the claimed plurality of separation structures. As per Claim 38, divider 156 reads on the claimed coupler as it extends away from a back wall towards a front area.

8. Claim 50-52, 55-61, and 73-79 are rejected under 35 U.S.C. 102(e) as being anticipated by Mueller et al (U.S. 6,956,715). Mueller discloses a data cartridge library including a transport assembly including a picker 34, cartridge magazines 17, and plural read/write devices 18 (note figures 2 and 6) such that drives that can handle a single cartridge can be utilized and/or drives that can handle two or more cartridges can be utilized (column 3 – lines 36 to 41). A drive that can handle a single cartridge can be considered a half-height drive and a drive that can handle two cartridges can be considered a full-height drive. Partition structure will be mounted to separate drives (column 6 – lines 40 to 55). Universal spaces 30 are provided for accepting various ancillary devices (column 4 – lines 1 to 10) but are not accessible by the picker(s).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 29-32, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caverly.

As per Claims 29 and 31

Caverly does not expressly disclose the claimed stand-off/retainer structure.

Official Notice is given that it was notoriously old and well known to give cartridge magazine cartridge slots with reference surfaces with such surfaces reading on the claimed stand-off structure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the cartridge magazines of Caverly with reference surfaces with such surfaces reading on the claimed stand-off structure. The motivation would have been: such structures served to positively define and control the positioning of tape cartridges inserted into a cartridge magazine.

As per Claims 30 and 32

Caverly does not expressly disclose the materials his upper and lower magazines, i.e., his first and second channel structures, are made from.

Official Notice is given that it was notoriously old and well known to form cartridge magazines from metal or plastic.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the cartridge magazines of Caverly from metal or plastic. The motivation would have been: Metal and plastic were both well established for forming cartridge magazines, with both having well known advantages.

As per Claim 39



Caverly discloses a coupler formed of a divider 156 which appears to be a single element as opposed to a pair of elements.

Official Notice is given that it was notoriously old and well known to form cartridge magazines dividers as a pair of coplanar elements rather than a single element.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the divider 156 of Caverly from a plurality of coplanar elements. The motivation would have been: it was known that an effective divider was formed by plural coplanar elements when the elements being separated from each other are generally integrated bodies such that contacting opposite ends of a side surface of the body is as effective as contacting the whole side surface in terms of defining the position of the body.

11. Claims 53, 54, 62, and 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al.

As per Claims 53 and 54

Mueller does not appear to discuss the electrical connector arrangement for different drive arrangements.

Official Notice is given that electrical connectors were a required element of data storage libraries so as to enable drive units to function and would of necessity be able to be positioned in locations to connect to the drives.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the data cartridge library with plural electrical connectors



to connect to the plural drives of Mueller and for the position of the connectors to be able to be made such as to adapt to the particular drive arrangement. The motivation would have been: such electrical connectors and their arrangement capacity would have been required for Mueller to properly function.

As per Claims 62 and 67

Mueller states that the universal space may contain such elements as electronic controls and I/O devices but does not specifically recite one or more connector boards.

Official Notice is given that the type of components Mueller states can be positioned in the universal space were elements that would include or would be associated with connector boards.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the data cartridge library universal space with plural connector. The motivation would have been: such connector boards would be included in the type of components Mueller states can be positioned in the universal space or would be required by such components.

As per Claims 68 and 69

Official Notice is given that it was notoriously old and well known to have the provision of an interior space of a device such as a data cartridge library with a plurality of components and a plurality of component types be accompanied by an associated partitioning arrangement.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the data cartridge library universal space with plural

Art Unit: 2652

partitioned areas. The motivation would have been: the provision of a universal space with a plurality of components and a plurality of component types dictated the need for appropriate partitions and partition mounting structure.

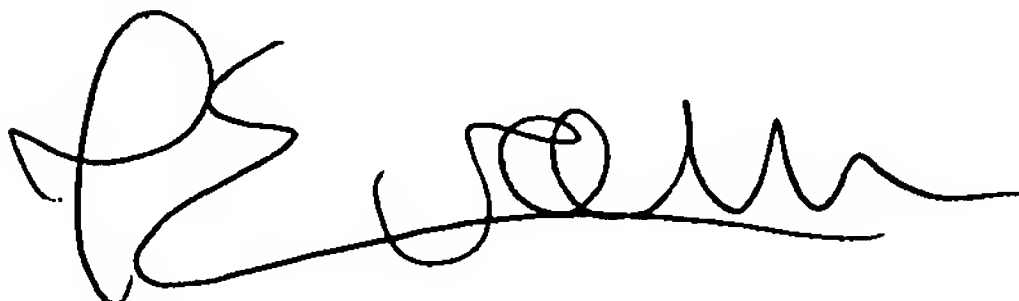
***Allowable Subject Matter***

12. Claims 1, 2, 44-49, and 80-82 are allowed. Claim 24-26, 28, 34-37, 42, 43, 63-66, and 70-72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 3-17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferson A. Evans whose telephone number is 571-272-7574. The examiner can normally be reached on Monday to Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. L. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JAE

November 22, 2005

Jefferson A. Evans  
Primary Examiner  
Art Unit 2652

**JEFFERSON EVANS  
PRIMARY EXAMINER**